

Now Available

# Agilent Poroshell 120

Advancing capabilities for high-performance HPLC

## Make every HPLC in your lab work harder.

Now you can get the benefits of exceptional efficiency – more speed and more resolution – on your conventional HPLC instruments.

Poroshell 120 reinvents the technology introduced with Poroshell 300 to deliver the higher resolutions and faster separations that you have seen for proteins and polypeptides, but now for a complete range of small molecules. Poroshell 120 columns give you speed and resolution like a sub-2  $\mu\text{m}$  column with up to 50% less back pressure – **usually less than 400 bar**.

## Poroshell 120 highlights

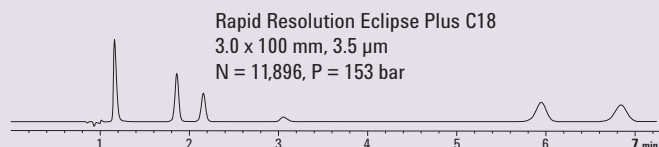
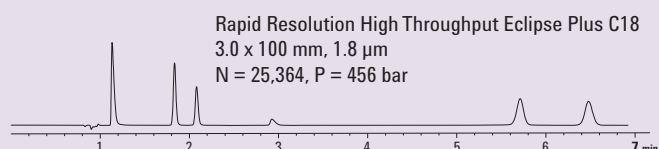
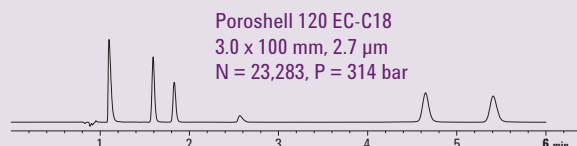
- Up to two times the number of theoretical plates vs conventional 3.5  $\mu\text{m}$  particles
- Improved resolving power, even as you take advantage of speed gains
- Lower back pressure than 2  $\mu\text{m}$ , even at higher flow rates
- More forgiving for dirty samples, due to 2  $\mu\text{m}$  frits
- Manufactured by Agilent, to Agilent's typical strict quality standards, and backed by Agilent worldwide technical support

Our measure is your success.

products | applications | software | services

**>90% efficiency of sub-2  $\mu\text{m}$ , 2X efficiency of 3.5  $\mu\text{m}$  HPLC Pressure (< 400 bar)**

**Sample:** 1. Saccharin, 2. Caffeine, 3. P-hydroxybenzoic acid, 4. Aspartame, 5. Dehydroacetic acid, 6. Benzoic acid



### Conditions

**Column:** 3.0 x 100 mm, **Mobile phase:** 65% A, 0.2% Formic acid, 35% B: Methanol Isocratic, **Flow rate:** 0.5 mL/min, 1  $\mu\text{L}$  injection 26°C, Sig = 220, 4 nm, Ref = Off



Agilent Technologies

## Particle technology designed by Agilent for peak performance.

Agilent reinvented its superficially porous particle technology to make the best product for small molecule separations. We minimize the manufacturing steps involved, and even make the porous shell in just one step, to provide maximum particle reproducibility for the best chromatographic reproducibility. Agilent's Poroshell 120 particles have a 1.7  $\mu\text{m}$  solid core with a 0.5  $\mu\text{m}$  porous shell – so you get performance advantages of sub-2  $\mu\text{m}$  particles with back pressure that is comparable to a 3  $\mu\text{m}$  particle.

## Poroshell 120 columns: A true problem solver!

Poroshell 120 columns will help you tackle some of the throughput and resolution issues you deal with every day:

### Problem

Your HPLC pressure specifications limit your particle size choice to a 3.5  $\mu\text{m}$  particle.

You enjoy the advantages of sub-2  $\mu\text{m}$  particles, but run into difficulty when you use dirty samples.

You have trouble getting the resolution you need for your highly sensitive analyses.

### Solution

Poroshell 120 will give you 2x the efficiency of a 3.5  $\mu\text{m}$  particle. You'll get speed and resolution like a sub-2  $\mu\text{m}$  with HPLC pressures – usually below 400 bar.

Poroshell 120 columns use a standard 2  $\mu\text{m}$  frit and resist plugging with dirty samples.

Longer Poroshell 120 columns will improve your resolution, and you can maximize your resolution using Poroshell 120 on a UHPLC.

## Poroshell 120

Poroshell 120 is available in a variety of phases, and more Poroshell 120 phases are coming soon!

Description	Size (mm)	Particle Size ( $\mu\text{m}$ )	EC-C18	SB-C18
Analytical	4.6 x 150	2.7	693975-902	683975-902
Analytical	4.6 x 100	2.7	695975-902	685975-902
Analytical	4.6 x 75	2.7	697975-902	687975-902
Analytical	4.6 x 50	2.7	699975-902	689975-902
Analytical	4.6 x 30	2.7	691975-902	681975-902
Solvent Saver	3.0 x 150	2.7	693975-302	683975-302
Solvent Saver	3.0 x 100	2.7	695975-302	685975-302
Solvent Saver	3.0 x 75	2.7	697975-302	687975-302
Solvent Saver	3.0 x 50	2.7	699975-302	689975-302
Solvent Saver	3.0 x 30	2.7	691975-302	681975-302
Narrow Bore	2.1 x 150	2.7	693775-902	683775-902
Narrow Bore	2.1 x 100	2.7	695775-902	685775-902
Narrow Bore	2.1 x 75	2.7	697775-902	687775-902
Narrow Bore	2.1 x 50	2.7	699775-902	689775-902
Narrow Bore	2.1 x 30	2.7	691775-902	681775-902



Learn more about Poroshell 120 by visiting  
[www.agilent.com/chem/discoverporoshell](http://www.agilent.com/chem/discoverporoshell)

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© Agilent Technologies, Inc. 2010  
Printed in the U.S.A. March 3, 2010  
5990-4571EN



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